

YIELD IMPROVEMENT THROUGH PROBE-BASED CACHE SIZE REDUCTION

Rajasekhar Cherabuddi
Meera Kasinathan

5

ABSTRACT OF DISCLOSURE

A multiple-way cache memory having a plurality of cache blocks and associated tag arrays includes a select circuit 10 that stores way select values for each cache block. The way select values selectively disable one or more cache blocks from participating in cache operations by forcing tag comparisons associated with the disabled cache blocks to a mismatch condition so that the disabled cache blocks will not 15 be selected to provide output data. The remaining enabled cache blocks may be operated as a less-associative cache memory without requiring cache addressing modifications.

PROVIDED BY MICROFILM